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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 08/675,280      | 07/01/1996  | RICHARD M. WEBER     | TI-19646.1          | 9382             |

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[REDACTED] EXAMINER

ATKINSON, CHRISTOPHER MARK

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 3743     | 45           |

DATE MAILED: 06/03/2002

Please find below and/or attached an Office communication concerning this application or proceeding.



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EXAMINER

ART UNIT

PAPER NUMBER

45

DATE MAILED:

This is a communication from the examiner in charge of your application.  
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### OFFICE ACTION SUMMARY

- Responsive to communication(s) filed on 5/17/02  
 This action is FINAL.

- Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

#### Disposition of Claims

- Claim(s) 1-2, 7-8, 17-22 and 25-31 is/are pending in the application.  
Of the above, claim(s) 29 is/are withdrawn from consideration.  
 Claim(s) \_\_\_\_\_ is/are allowed.  
 Claim(s) 1-2, 7-8, 17-22, 25-28 and 30-31 is/are rejected.  
 Claim(s) \_\_\_\_\_ is/are objected to.  
 Claims \_\_\_\_\_ are subject to restriction or election requirement.

#### Application Papers

- See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.  
 The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.  
 The proposed drawing correction, filed on \_\_\_\_\_ is  approved  disapproved.  
 The specification is objected to by the Examiner.  
 The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. § 119

- Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).  
 All  Some\*  None of the CERTIFIED copies of the priority documents have been received.  
 received in Application No. (Series Code/Serial Number) \_\_\_\_\_  
 received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

- Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

#### Attachment(s)

- Notice of Reference Cited, PTO-892  
 Information Disclosure Statement(s), PTO-1449, Paper No(s).  
 Interview Summary, PTO-413  
 Notice of Draftsperson's Patent Drawing Review, PTO-948  
 Notice of Informal Patent Application, PTO-152

- SEE OFFICE ACTION ON THE FOLLOWING PAGES -

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***Response to CPA***

Applicant's arguments filed 9/4/2001 have been fully considered but they are not persuasive.

Claim 29 remains withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim.

***Specification***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of 37 CFR 1.71(a)-(c):

(a) The specification must include a written description of the invention or discovery and of the manner and process of making and using the same, and is required to be in such full, clear, concise, and exact terms as to enable any person skilled in the art or science to which the invention or discovery appertains, or with which it is most nearly connected, to make and use the same.

(b) The specification must set forth the precise invention for which a patent is solicited, in such manner as to distinguish it from other inventions and from what is old. It must describe completely a specific embodiment of the process, machine, manufacture, composition of matter or improvement invented, and must explain the mode of operation or principle whenever applicable. The best mode contemplated by the inventor of carrying out his invention must be set forth.

© In the case of an improvement, the specification must particularly point out the part or parts of the process, machine, manufacture, or composition of matter to which the improvement relates, and the description should be confined to the specific improvement and to such parts as necessarily cooperate with it or as may be necessary to a complete

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understanding or description of it.

The specification is objected to under 37 CFR 1.71 because the originally filed specification fails to disclose the device of claims 26 and 31.

*Paper No. 34*

The amendment filed 9/25/2000 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is the proposed addition to the specification of page 7 between lines 16 and 17.

Applicant is required to cancel the new matter in the reply to this Office action.

***Claim Rejections - 35 USC § 112***

Claims 26 and 31 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The originally filed specification fails to disclose the device of claims 26 and 31.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 25-27 and 30-31 are rejected under 35 U.S.C. § 102(b) as being anticipated by Telkes.

The patent of Telkes, in Figure 4, discloses applicant's claimed invention.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103.

Claim 1-2, 7-8, 17-22 and 28 are rejected under 35 U.S.C. § 103 as being unpatentable over Telkes in view of Voorhes et al. The patent of Telkes discloses all the claimed features of the invention with the exception of a portion of the enclosure/wall including a composite of highly thermally conductive fibers disposed in a matrix.

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The patent of Voorhes et al., in at least Figure 11d, discloses that it is known to have a wall including a composite of highly thermally conductive graphite fibers disposed in a matrix for the purpose of increasing the thermal conductivity of the wall. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Telkes a portion of the enclosure/wall including a composite of highly thermally conductive graphite fibers disposed in a matrix for the purpose of increasing the thermal conductivity of the wall as disclosed in Voorhes et al. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the specifically claimed phase change material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Claims 21-22 are rejected under 35 U.S.C. § 103 as being unpatentable over Telkes in view of Voorhes et al. as applied to claims 1-2, 7-8, 17-20 and 28 above, and further in view of Hayes or Alspaugh. The patent of Telkes discloses all the claimed features of the invention with the exception of the specifically claimed phase change material.

The patents of Hayes and Alspaugh discloses that it is well known to have a heat storage phase change material being a wax for the purpose of having a large thermal storage capacity per unit weight or volume of storage medium. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Telkes as modified, the phase change material being a wax for the purpose of having a large thermal storage capacity per unit

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weight or volume of storage medium as disclosed in Hayes or Alspaugh.

***Response to Arguments***

Applicant's concerns directed toward Telkes are not found persuasive. Telkes, in Figure 4 and in column 4, lines 9-10 and 43-51, is believed to anticipate applicant's claimed invention since Telkes states glass is a material which has a suitable heat-conductivity and it therefore read as a heat transfer material. Also, the matrix 14' is coupled physically to the wall in view of Telkes stating the matrix "will not settle to the bottom".

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Telkes a portion of the enclosure/wall including a composite of highly thermally conductive graphite fibers disposed in a matrix for the purpose of

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increasing the thermal conductivity of the wall as disclosed in Voorhes et al. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the specifically claimed phase change material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Applicant's concerns directed toward the device of claims 26 and 31 are not found persuasive. First, the examined claims do not read on the embodiment of Figure 1 since this non-elected species is abandoned per the Board of Appeals Decision. Only the non-elected embodiment (i.e. Figure 1) on page 7 of applicants originally filed specification does it state that the PCM 7 partially or fully fills the remainder of the cavity. Nowhere in the originally filed specification does it state that the elected embodiments' (i.e. Figure 2) cavity can be fully filled with the PCM 27. However, Figure 3 of applicant's application does show a gap between the phase change medium (27) and the plate (21). Therefore, contrary to the device of claims 26 and 31, the phase change medium (27) as illustrated in Figure 3 **can** slide or move within the cavity (i.e. enclosed internal space). Also, when the phase change medium changes from a solid phase to a liquid phase, the phase change medium again can and will flow or move within the cavity since nowhere in the originally filed specification does it state that the elected embodiments' (i.e. Figure 2) cavity can be fully filled with the PCM 27.

Applicant's concerns directed toward the specification objection and the 35 U.S.C. 112, first paragraph rejection are not found persuasive. The specification is objected to under 37 CFR

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1.71 because the originally filed specification fails to disclose the device of claims 26 and 31.

The amendment filed 9/25/2000 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is the proposed addition to the specification of page 7 between lines 16 and 17.

Applicant is required to cancel the new matter in the reply to this Office action.

The originally filed specification fails to disclose the device of claims 26 and 31. Each and every element of claims 26 and 31 was not originally described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

### *Conclusion*

This is a continuation of applicant's earlier Application No. 08/675,280. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

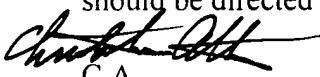
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Atkinson whose telephone number is (703) 308-2603.



C.A.  
May 30, 2002

CHRISTOPHER ATKINSON  
PRIMARY EXAMINER